

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016788**Date Inspected:** 13-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

FCAW root pass welding of weld joint SEG3013AC-002, side A located on PCMK OBG segment 13AW, bottom plate. Welders were identified as 202122, 047866. QC was identified as ZPMC CWI Wang Jie (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Zhong Guo Hui (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-2231-B-U2-F. The root gap was observed to be between 0 and 3mm in conformance with WPS-B-T-2231-B-U2-F. The weld joint was being kept at or above the minimum preheat and interpass temperature with electric heaters placed above and below the plates at the weld.

SMAW welding of weld joint SSD1-TL5-1B-F-14 located on PCMK south tower, lift 5, internal connection plate to skin C. Welder was identified as 052930. QC was identified as ZPMC CWI Liu Yang (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC CWI Yu Zhi Lai (QCA2), who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-3213-TC-U4c.

SMAW welding of temporary staging brace located on PCMK north tower, lift 4, at approximately 144M

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

elevation. Welder was identified as 050038. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-P-4114. See photo below.

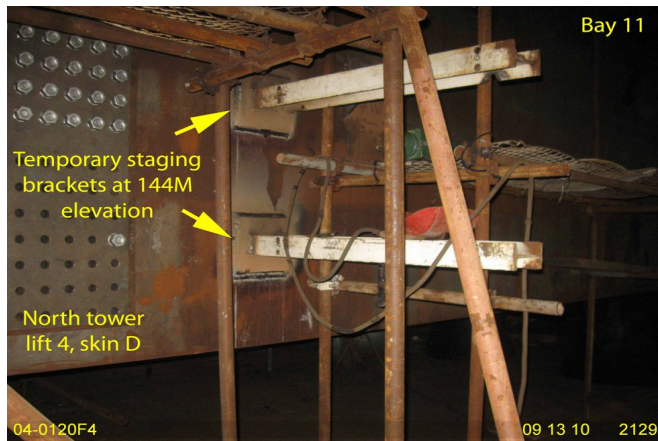
### Heavy Dock

This QA Inspector randomly observed the following work being performed on the Heavy Dock:

No apparent welding related work was being performed on the Heavy Dock. All 4 towers' lift 3 were connected and positioned vertically on a base pedestal at end of the Heavy Dock. East and south towers, lift 4 were positioned on top of east and south towers, lift 3, respectively, on the Heavy Dock, near the end where the ship was moored. All 4 towers' lift 2 were positioned horizontally on the deck of the ship at the end of the Heavy Dock.

OBG9W was positioned on top of OBG 9E on the deck of the ship. CB11 and CB12 were also positioned on the deck of the the ship.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No significant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Goulet, George
----------------------	----------------

Quality Assurance Inspector
-----------------------------

---

<b>Reviewed By:</b>	Dawson, Paul
---------------------	--------------

QA Reviewer
-------------